

**Results:** 31 handovers were audited. 45% of handovers had a delayed start, the most common reasons being an unprepared list or team members being late. Handover attendance was poor for nursing staff and consultants. Electronic handover was always used. Of the 283 patients on the lists, data recording was good for name, date of birth, admission date, ward, diagnosis, treatment plan and outstanding tasks. Recording was substandard for results, if review was required, clinical status and patient bed space.

**Conclusions:** The guidelines were being achieved in many key aspects of handover (thanks largely to the electronic handover system). However, areas requiring improvement include start time, nursing attendance and recording of patient bed and clinical status. We recommend that there is a handover start bleep reminder and that nursing staff and consultants attend handover.

#### 0489: THE USE OF GUIDELINES TO RATIONALISE BLOOD TESTS ON EMERGENCY SURGICAL PATIENTS

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**Aim:** Most emergency general surgical patients have blood tests performed on admission with no published evidence on the subject. This study aimed to identify blood tests frequently performed inappropriately and tests often missed, and to create and evaluate the potential impact of guidelines.

**Methods:** A representative group of general surgical emergency admissions over 3 months were randomly selected and retrospectively analysed. Data collected included presenting complaint, blood tests on admission, and presence of diabetes, jaundice, anticoagulation and haemodynamic instability. A novel guideline was applied and comparison made between predicted and actual blood tests performed.

**Results:** Total of 121 cases (67 female, 54 male, median age 65; range 17–101 years). 10/121 (8%) were outside the remit of the proposed guideline. Only 28/111 (25%) adhered to proposed guideline. CRP and amylase (68/107 and 88/107, actual vs predicted) were frequently missed, while an excess of coagulation screens and group and saves were performed (42/21 and 51/36, actual vs predicted). Strict adherence to the guideline would have resulted in a saving of £2.99 per patient.

**Conclusion:** Many unnecessary blood tests are performed while others are missed. The introduction of guidelines could lead to significant savings when applied to all patients.

#### 0536: DAY SURGERY PERFORMANCE: USING SIMPLE, COST NEUTRAL MEASURES TO IMPROVE CLINICAL AND FINANCIAL PRODUCTIVITY

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Productive Day Surgery units can help provide efficiencies needed to modernise the NHS in a challenging financial climate. This study set out to improve DS performance in an Acute Trust after audit results highlighted inefficiencies in 2008.

From 2008 – 2010, data was collected at a single DS unit. Booking efficiency (% of each list booked), theatre efficiency (% of theatre time used), patient attendances, cancellations and case volume were measured. A lead surgeon, anaesthetist, nurse and manager established a DS improvement Steering group. Novel scheduling and booking programmes were developed, and new managers recruited in a cost neutral framework. Efficient practise was cemented into the work culture through clinician engagement.

Booking efficiency improved from 59.9% to 79.9%, and theatre efficiency improved from 64.6% to 78.4%. Case volume increased by 17% over the first 6 months. DNA/cancellation rate fell from 21% to 5%. Global DS unit performance increased from of 145<sup>th</sup> out of 166 units in 2008 to 66<sup>th</sup> in 2010, and revenue generation rose by more than £281,000.

Improvement of DS performance can play a central role in delivering mandated DH efficiency savings. Multidisciplinary working engineered sizeable efficiency and financial gains in a cost neutral framework.

#### 0555: CAN THE MODE OF ANAESTHESIA INFLUENCE THE READMISSION RATE FOLLOWING ELECTIVE HERNIA REPAIR?

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**Aim:** To assess if the mode of anaesthesia used for elective hernia repair influences readmission following successful discharge from day surgery.

**Method:** Retrospective case note review of 100 consecutive patients (June 2010 – December 2011) who underwent elective hernia repair performed by a single consultant.

**Results:** Average age was 55 years (19–79), with 89 males and 11 females. 46% of patients had right and 40% underwent left inguinal hernia repair. The remaining 14% were: 5% bilateral, 4% femoral, 4% umbilical and 1% epigastric hernia repair. Of 100 patients, 87% had general anaesthetic, 9% spinal and 4% local anaesthetic. Six patients were readmitted, all had the procedure under general anaesthetic; of these, four were for pain management, one for wound infection and one for scrotal haematoma. The patient with scrotal haematoma was admitted for 2 days but the rest were successfully discharged within 24 hours.

**Conclusion:** Inadequate analgesia post-operatively was the main factor for readmission in our study. Small sample size has provided limited information but with a recent change in the consultant's practice to perform procedures under local/regional anaesthesia, further study would look to compare the factors for readmission.

#### 0558: ARE MODIFIED EARLY WARNING SCORES RECORDED CORRECTLY IN SURGICAL PATIENTS?

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**Background /Aims:** Modified early warning scores (MEWS) have been shown to correlate well with transfer to HDU/ITU, length of stay and in-patient mortality. We aimed to establish whether MEWS were being recorded and acted upon in accordance with Trust and NICE guidance.

**Methods:** Surgical in-patients (n=71) were audited over a 24 hour period for MEWS, including accuracy of calculation, frequency of recording, request for review and timing of review. The results guided re-education and implementation of changes. Subsequently, we re-audited (n=67).

**Results:** The percentage of patients with incorrectly calculated MEWS was 22% compared with 3% after re-education (p<0.0001). The percentage of missing MEWS was initially 39% compared with 14% after re-education (p<0.0001), with the majority of missing scores occurring between 11PM and 8AM (53%). In 60% patients a review was not asked for following MEWS triggering, compared with 14% following re-education (p<0.05). Of those MEWS that triggered, only 40% adhered to the correct timing of review (<30 minutes) compared with 71% on re-education.

**Conclusions:** Re-education and organisational changes improved MEWS, but the level of accuracy remained unsatisfactory. Further education and the use of hand-held digital accessories may be required.

#### 0643: ARE SERUM BILIRUBIN LEVELS USEFUL IN DISCRIMINATING BETWEEN PERFORATED AND NON PERFORATED APPENDICITIS?

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**Aim:** To assess if serum bilirubin levels can be used to differentiate between perforated and non perforated appendicitis

**Methods:** A retrospective study of appendicectomies (n=188) performed in two different hospitals from March 2011 to September 2011 was performed. The cases were divided according to histology as normal, inflamed and perforated. Pre operative measurements of serum bilirubin, white cell count and CRP levels were compared between the three groups using a one way analysis of variance.

**Results:** No significant difference in the mean serum bilirubin levels between the inflamed and perforated groups was noted (p=0.1). Mean serum bilirubin levels were found to be significantly lower in the normal group when compared to the inflamed (p=0.02) and perforated groups (p=0.001). Mean CRP levels were significantly higher in the perforated group when compared to the normal (p<0.005) and inflamed (p<0.005) groups. White cell counts were also significantly higher (p<0.005) but there was no significant difference between the inflamed and perforated groups.

**Conclusions:** While hyperbilirubinaemia is suggestive of appendicitis in conjunction with the clinical presentation, it cannot be used to